

ABSTRACT

Methods and kits that use nucleotide analogs to confer increased accuracy and improved resolution in the analysis and sequencing of oligonucleotide mixtures are provided.

1. A method for sequencing an oligonucleotide mixture, comprising:
 (a) providing a sample of an oligonucleotide mixture;
 (b) providing a set of four nucleotide analogs, each having a different fluorescent label;
 (c) reacting the sample with the set of four nucleotide analogs;
 (d) detecting the fluorescent labels of the nucleotide analogs;
 (e) determining the sequence of the oligonucleotide mixture based on the detection of the fluorescent labels.